

5 pyttir



sem þú þarft að forðast

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Yfirlit

1. Ertu að finna upp hjólið aftur?
2. Þekkirðu hvað þú ert með í höndunum?
3. Lestu handbækur?
4. Er nóg að uppfæra?
5. Ertu að nota þjónustuna (Support)?

1) Ertu að finna upp hjólið aftur?

Það er nauðsynlegt að vita

- hvaða hugbúnaðarþróun er að eiga sér stað
- hvaða vandamálum eru þau að lenda í
- hvað eru þau að reyna að láta kerfið sitt gera
- hvernig fara þau að því

hvað hefur þú í höndunum til að léttu undir?

Dæmi 1

Hugbúnaðarfyritæki var á fullu að skrifa XML wrapping vél í .NET fyrir viðskiptavin

Fullur XML stuðningur í Oracle fyrir Xquery og XML í SQL

- XMLType tagið
- SQL XML: XMLElement, XMLAttributes, XMLForest, XMLConcat, XMLAgg, XMLPI, XMLComment , XMLRoot, og meira.
- XQuery:

```
SELECT XMLQuery('for $e in doc("/public/emp.xml")/emp/emp
let $d :=
doc("/public/dept.xml")//dept[@deptno = $e/@deptno]/@dname
where $e/@salary > 100000
order by $e/@empno
return <emp ename="{ $e/@ename}" dept="{ $d}"/>'
RETURNING CONTENT) FROM DUAL;
```

```

select  xmlelement ("rss",
            xmlattributes ('2.0' as "version"),
            xmlelement ("channel",
                xmlforest ('Nýjir íslendigar' as "title",
                    'http://www.thjodskra.is/' as "link",
                    'Flúnkunýjir þegnar hið íslenska ríkis' as "description",
                    'en-us' as "language",
                    'Copyright 2009, Olafur Tryggvason' as "copyright"
                ),
                xmlagg (xmlelement ("item",
                    xmlforest (convert (t.nafn, 'US7ASCII', 'WE8ISO8859P1') as "title",
                        'http://www.thjodskra.is/leit?kt=' || t.kennitala as "link",
                        convert ( t.kennitala
                            || chr (10)
                            || chr (13)
                            || t.heimilisfang_thgf,
                            'US7ASCII',
                            'WE8ISO8859P1'
                        ) as "description",
                        to_char (to_date (substr (t.kennitala, 1, 6),
                            'ddmmyy'
                        ),
                            'Dy, dd Mon yyyy hh24:mi:ss',
                            'nls_date_language=american'
                        )
                            || ' GMT' as "pubDate"
                    )
                )
            )
        )
from thjodskra_imp t
where to_number (substr (kennitala, 1, 2)) < 32
order by to_number (case substr (kennitala, -1, 1)
    when '0' then '20'
    when '9' then '19'
end || substr (kennitala, 5, 2)) desc,
to_number (substr (kennitala, 3, 2)) desc,
to_number (substr (kennitala, 1, 2)) desc

```

Dæmi 2

Innri þróun var að hanna vefþjónustumillilag í python til að gera gagnagrunni kleift að nálgast gögn í gegnum vefþjónustur

UTL_DBWS gerir SQL og PL/SQL kleift að nálgast hvaða vefþjónustu sem er.

Standard Call Properties – skilgreiningar á kalli

```
- 'USERNAME' og 'PASSWORD'  
- 'ENCODINGSTYLE_URI' Encoding style skilgreint sem namespace URI. Sjálfval er  
  SOAP 1.1 (http://schemas.xmlsoap.org/soap/encoding/)  
- 'OPERATION_STYLE' Virknistegund, möguleikar 'RPC' og 'DOCUMENT'  
- 'SESSION_MAINTAIN' Boolea. Viðheldur tengingu fyrir fleiri köll (FALSE)  
- 'SOAPACTION_USE' Segir til hvort eigi að nota SOAPAction (FALSE).  
- 'SOAPACTION_URI' Ef SOAPAction er notað, skilgreinir viðeigandi URI.
```

```
create or replace function get_city_from_zipcode (p_zipcode in varchar2)
```

```
return varchar2 as
```

```
l_service          utl_dbws.service;  
l_call             utl_dbws.call;  
l_result           anydata;  
l_wsdl_url         varchar2 (32767);  
l_namespace        varchar2 (32767);  
l_service_qname    utl_dbws.qname;  
l_port_qname       utl_dbws.qname;  
l_operation_qname utl_dbws.qname;  
l_input_params     utl_dbws.anydata_list;
```

```
begin
```

```
l_wsdl_url := 'http://webservices.imacination.com/distance/Distance.jws?wsdl';  
l_namespace := 'http://webservices.imacination.com/distance/Distance.jws';  
l_service_qname := utl_dbws.to_qname (l_namespace, 'DistanceService');  
l_port_qname := utl_dbws.to_qname (l_namespace, 'Distance');  
l_operation_qname := utl_dbws.to_qname (l_namespace, 'getCity');  
l_service :=  
    utl_dbws.create_service (wsdl_document_location      => urifactory.geturi (l_wsdl_url),  
                           service_name              => l_service_qname  
                           );  
  
l_call :=  
    utl_dbws.create_call (service_handle      => l_service, port_name => l_port_qname,  
                          operation_name     => l_operation_qname);  
  
l_input_params (0) := anydata.convertvarchar2 (p_zipcode);  
l_result := utl_dbws.invoke (call_handle => l_call, input_params => l_input_params);  
utl_dbws.release_call (call_handle => l_call);  
utl_dbws.release_service (service_handle => l_service);  
return anydata.accessvarchar2 (l_result);
```

```
end;
```



```
SQL> SELECT get_city_from_zipcode('94065') FROM dual;
```

```
GET_CITY_FROM_ZIPCODE('94065')
```

```
-----  
Redwood City
```

```
SQL> SELECT get_city_from_zipcode('94066') FROM dual;
```

```
GET_CITY_FROM_ZIPCODE('94066')
```

```
-----  
San Bruno
```

```
SQL>
```


2) Þekkirðu hvað þú ert með í höndunum?

- Framework innan grunnsins
 - DBMS_
 - UTL_
 - Oracle Text
 - Oracle Multimedia (*interMedia*)
 - ORDAudio, ORDDOC, ORDImage, ORDVideo
 - Oracle Streams

Dæmi

DBMS_CRYPT

Dulkóðun og afkóðun á gögnum (DES, 3DES, AES, RC4, 3DES_2KEY) og HASH útreikningur (MD5, SHA-1, MD4, HMAC_MD5, HMAC_SH1). Hægt að nota í netsamskiptum (t.d. SQLNET eða TCP).

DBMS_PIPE

Samskipta þjónusta á milli session-a í gagnagrunninum. Virkar eins og OS PIPE forritun.

UTL_COMPRESS

Mismunandi föll fyrir gagnabjöppun

Dæmi

UTL_DBWS

Vefþjónustustuðningur innan SQL og PL/SQL.

UTL_HTTP

HTTP aðgangur innan SQL og PL/SQL. Styður HTTPS.

UTL_TCP

TCP/IP stuðningur. Gerir Oracle DB kleift að tala við t.d. jaðartæki.

3) Lestu handbækur?

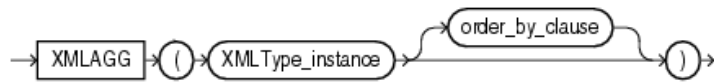
- Til að vita hvað er hægt að gera
 - þarf að lesa handbækur frá framleiðanda
- Oracle gerir mjög góðar og gagnlegar handbækur
 - 9gr2 : <http://www.oracle.com/pls/db92/db92.homepage>
 - 10gr2 : <http://www.oracle.com/pls/db102/homepage>
 - 11g : <http://www.oracle.com/pls/db111/homepage>

Dæmi um innihald

- New Features Guide
- SQL Reference
- PL/SQL Reference
- PL/SQL Packages and Types
- Application Development
 - Java
 - XML
 - OCI

XMLAGG

Syntax



[Description of the illustration XMLAgg.gif](#) [Description of XMLAgg.gif follows](#)

Purpose

XMLAgg is an aggregate function. It takes a collection of XML fragments and returns an aggregated XML document. Any arguments that return null are dropped from the result.

XMLAgg is similar to SYS_XMLAgg except that XMLAgg returns a collection of nodes but it does not accept formatting using the XMLFormat object. Also, XMLAgg does not enclose the output in an element tag as does SYS_XMLAgg.

Within the *order_by_clause*, Oracle Database does not interpret number literals as column positions, as it does in other uses of this clause, but simply as number literals.

See Also:

[XMLELEMENT](#) and [SYS_XMLAGG](#)

Examples

The following example produces a Department element containing Employee elements with employee job ID and last name as the contents of the elements:

```
SELECT XMLELEMENT("Department",
  XMLAGG(XMLELEMENT("Employee",
    e.job_id||' '||e.last_name)
  ORDER BY last_name)
  as "Dept_list"
  FROM employees e
  WHERE e.department_id = 30;
```

Dept_list

```
<Department>
  <Employee>PU_CLERK Baida</Employee>
  <Employee>PU_CLERK Colmenares</Employee>
  <Employee>PU_CLERK Himuro</Employee>
  <Employee>PU_CLERK Khoo</Employee>
  <Employee>PU_MAN Raphaely</Employee>
  <Employee>PU_CLERK Tobias</Employee>
</Department>
```

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If you are familiar with earlier Oracle releases and are moving to Oracle Database 10g, these books describe the new features, and explain how to upgrade your database.

New Features Guide	HTML	PDF
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Enterprise Manager Licensing Information	HTML	PDF
Licensing Information	HTML	PDF
Secure Backup Licensing Information	HTML	PDF



Skýrslutæknifélag Íslands



Feature/Option	XE	SE1	SE	EE
High Availability				
Oracle Data Guard – Redo Apply	N	N	N	Y
Oracle Data Guard – SQL Apply	N	N	N	Y
Rolling Upgrades – Patch Set, Database and O/S	N	N	N	Y
Fast-start selectable recovery time	N	N	N	Y
Comprehensive online schema reorganization/redefinition	N	N	N	Y
Online system changes – CPU, disk, memory	N	Y	Y	Y
Flashback Query	Y	Y	Y	Y
Flashback Table	N	N	N	Y
Flashback Database	N	N	N	Y
Flashback Transaction Query	N	N	N	Y
Block-level media recovery	N	N	N	Y

4) Er nóg að uppfæra?

- Við hverja uppfærslu eru breytingar
 - Breytingar á CBO
 - Breytingar á kóðahegðun
 - Breytingar á grunnvinnslu
- Uppfærslur
 - 10.2.0.3 → 10.2.04 : Ekki mikið að gerast
 - 10.1 → 10.2 : Fullt að gerast
 - 10g → 11g : Lestrartími

- Fara reglulega í gegnum gamlan kóða
- Skoða breytingar á CBO
- Nýjungar eru hraðvirkari

- T.d. frá 9 – 10 var pl/sql þýðingarvélin endurskrifuð

New Features

Dæmi um kafla

1.1.5 PL/SQL Improvements

- 1.1.5.1 PL/SQL Conditional Compilation
- 1.1.5.2 Obfuscation of Dynamically Generated PL/SQL Source Code
- 1.1.5.3 Relaxation of Line Length and Overall Limits for the DBMS_OUTPUT PL/SQL Package
- 1.1.5.4 UTL_NLA PL/SQL Package for Matrix Math

1.10 Information Integration

- 1.10.1 Oracle Streams Performance and Usability Improvements
 - 1.10.1.1 Streams Performance
 - 1.10.1.2 Support for Hot Mining With Downstream Capture
 - 1.10.1.3 Buffered Messaging
 - 1.10.1.4 Commit-Time Ordering of Messages
 - 1.10.1.5 Apply Handler Dependency Declaration
 - 1.10.1.6 Simplified Large Object (LOB) Handling in Streams Apply Process
 - 1.10.1.7 Declarative LCR Transformations
 - 1.10.1.8 Notification Enhancements
 - 1.10.1.9 Oracle Java Message Service (OJMS) Nonpersistent Messaging
 - 1.10.1.10 Simplified Configuration APIs
 - 1.10.1.11 Oracle Streams Administration in the Enterprise Manager Web Console

1.12 Performance and Scalability

- 1.12.1 Improved Large Object (LOB) Performance
 - 1.12.1.1 LOB Access Statistics in Dynamic Performance Views
 - 1.12.1.2 Online Redefinition Supports Parallel Execution for LONG-to-LOB Migration
 - 1.12.1.3 Performance Improvements for Loading LOBs
- 1.12.2 Other Performance Improvements
 - 1.12.2.1 Asynchronous Commit
 - 1.12.2.2 Checkpointing Improvements
 - 1.12.2.3 Database Change Notification
 - 1.12.2.4 Fast Partition Split for Partitioned Index Organized Tables
 - 1.12.2.5 Improved Aggregation Performance
 - 1.12.2.6 Parallel Join Bitmap Filtering

5) Ertu að nota þjónustuna (Support)?



- Gagnagrunnsleyfi kosta
- Uppfærslu- og þjónustugjöld kosta
- Aðgangur að 24/7 þjónustuborði
- Fáir nýta sér það

- Oracle er ekki með neinar takmarkanir
- Óvart farið yfir strikið
- Þora ekki að hafa samband

Spurningar

